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77361  
SOV/79-30-1-22/78

AUTHORS:

Vakhtin, V. G., Zavgorodniy, S. V.

TITLE:

Alkylation of Fluorobenzene With Propylene and  
Cyclohexene in the Presence of  $\text{BF}_3 \cdot \text{H}_3\text{PO}_4$ 

PERIODICAL:

Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp  
109-111 (USSR)

ABSTRACT:

The maximum yield of 1-isopropyl-4-fluorobenzene (yield 85%), bp 153-155°,  $n_D^{20}$  1.4733, and 1,3-diisopropyl-4-fluorobenzene (yield 15%), bp 76-78°,  $n_D^{20}$  1.4783, is obtained at a molar ratio of fluorobenzene, propylene, and catalyst 3:1:0.3, alkylation temperature 80°, and rate of introduction of propylene into the reaction mixture, 0.17 moles per 1 mole of fluorobenzene per hr. Alkylation of fluorobenzene with cyclohexene yields only 1-cyclohexyl-4-fluorobenzene, bp 231-233°,  $n_D^{20}$  1.5074. The maximum yield (62%) is obtained at the ratio of fluorobenzene,

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Alkylation of Fluorobenzene With Propylene  
and Cyclohexene in the Presence of  $\text{BF}_3 \cdot \text{H}_3\text{PO}_4$

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cyclohexene, and catalyst 3:1:0.3, at 30° and rate of introduction of cyclohexene, 0.056 moles per 1 mole of fluorobenzene per hr. The obtained compounds auto-oxidized to hydrogen peroxides and were oxidized into corresponding acids with nitric acid. The maximum concentration of its hydrogen peroxide for p-isopropyl-fluorobenzene is obtained in 27 hr and is 23.2%, and for p-cyclohexylfluorobenzene, in 10 hr and is 12%. On further oxidation, hydrogen peroxide of p-isopropyl-fluorobenzene yields p-fluoroacetophenone, bp 193°,  $n_{D}^{20}$  1.5020, and that of p-cyclohexylfluorobenzene yields (57%) p-fluorobenzoic acid, and glutaric acid (yield 10%), mp 95-96°. There are 5 references, 4 Soviet, 1 U.S. The U.S. reference is: Sietler, S. M., Lawson, E. L., Smith, P. G., J. Am. Chem. Soc., 61, 161 (1939).

ASSOCIATION: Voronezh State University (Voronezhskiy gosudarstvennyy universitet)  
SUBMITTED: January 15, 1959

Card 2/2

66485

SOV/20-129-1-31/64

5(3) 5.3300(A)

AUTHORS: Zavgorodniy, S. V., Zavgorodnyaya, V. L.

TITLE: Synthesis and Autoxidation of p-Isopropylcyclohexylbenzene

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 1,  
pp 113 - 116 (USSR)

ABSTRACT: In the paper under review the authors investigated the synthesis of the above mentioned substance (I) by cycloalkylation of isopropylbenzene with cyclohexene in the presence of the catalyst  $\text{BF}_3 \cdot \text{H}_2\text{PO}_4$  as well as its autoxidation by air. In order to find the optimum conditions of synthesis the reaction was tested at various molar ratios and temperatures between 20 and 85°. It was found that the two substances participating in the reaction react readily and give a 78% yield of the final product (I). For temperatures of 20-25° and a reaction time of 19 hours, the optimum molar ratio of isopropylbenzene:cyclohexene:catalyst was 3:1:0.3. About 6% polycyclohexylisopropylbenzenes (see Reaction Diagram) are formed under these conditions. The substance mentioned in the title has 2 tertiary carbon atoms.

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## Synthesis and Autoxidation of p-Isopropylcyclohexylbenzene SOV/20-129-1-31/64

Molecular oxygen attacks mainly these C atoms and thus forms hydroperoxides (see Diagram). After having been purified by 70% H<sub>2</sub>SO<sub>4</sub>, (I) is comparatively easily oxidized by oxygen from the air in the presence of manganese resinate or with alkaline additions at 95-120°. The oxygen attack is aimed at the tertiary C atom of the isopropyl group and is stopped by the formation of hydroperoxide of (I) as (II). Since it is more difficult to oxidize the other tertiary C atom (of the cyclohexyl radical) by molecular oxygen, the quantities of cumylicyclohexyl (II) formed are very small. As can be seen from the curves of figure 1 autoxidation of (I) takes place in the following way: At first hydroperoxide of (I) is accumulated in the solution to a well defined maximum. Then hydroperoxide decomposes until it disappears entirely from the reaction mixture. p-Cyclohexylacetophenone and p-cyclohexylphenol are the final products of this oxidation. If manganese resinate alone is added to (I), instead of further resinate alkaline additions (soda or calcium hydroxide) oxidation proceeds much slower. If the concentration of hydroperoxide is highest (6%), is in the presence of manganese resinate, soda, and barium peroxide at 118-120°, and has an air circulation of 30 l/h, autoxidation of (I) proceeds at the fastest rate (6% per

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Synthesis and Autoxidation of p-Isopropylcyclohexylbenzene SOV/20-129-1-31/64

per hour). The autoxidation rate depends on temperature (Fig 2) as well as on the rate of air circulation. If hydroperoxide is split with concentrated  $H_2SO_4$  cyclohexylphenol and acetone are formed. p-Isopropylphenol was separated in the form of traces only. There are 2 figures, 3 tables, and 3 references, 1 of which is Soviet.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

PRESENTED: June 2, 1959, by A. V. Topchiyev, Academician

SUBMITTED: June 2, 1959

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Card 3/3

ZAVGORODNYY V. K.

AUTHOR:

Zavgorodniy, V. K.

SOV/64-58-5-10/21

TITLE: The Modernization of Hydraulic Presses by an Accumulator-Less Unit Drive (Modernizatsiya gidravlicheskih pressov s individual'nym bezakkumulyatornym privodom)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 5, pp. 302 - 309 (USSR)

ABSTRACT: Soviet industry has recently produced new hydraulic presses with a unit drive of the types PA-472A, PV-474, and F-476. For the drive of these presses the Khar'kov Factory "Gidroprivod" together with the SKB-7 constructs a hydroaggregate with improved technical and economic properties. A detailed description of the aggregate and the working technique are mentioned. As the electrical scheme of these presses does not meet the demands of the modern pressing technology for plastic articles, and as it is somewhat dangerous to use, the author of this paper elaborated a new scheme which was introduced in the Karacharovskiy Factory for Plastics. A diagram of the arrangement including the electrical scheme of the semiautomatic control of the hydraulic press, the heating, and the automatic temperature control is given together with an explanation of the working principle. It is pointed out that besides the advances

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The Modernization of Hydraulic Presses by an  
Accumulator-Less Unit Drive

SOV/64-58-5-10/21

described the presses still have some deficiencies, as they work, for instance, at increased low pressure of the working fluid ( $15-25 \text{ kg/cm}^2$ ) and at reduced high pressure ( $200 \text{ kg/cm}^2$  instead of  $320$  or  $400 \text{ kg/cm}^2$ ); this leads to an increase in the power of the drive, as well as in the dimensions and the weight of single parts of the press. The hydraulic apparatus does not function satisfactorily either. There are 5 figures and 2 tables.

1. Hydraulic presses--Design
2. Hydraulic presses--Operation
3. Electrical equipment--Design
4. Control systems--Performance

Card 2/2

ZAVGORODNIY, Viktor Konstantinovich; ZAV'YALOV, L.G., inzh., retsenzent;  
ALAVENIKOV, Ya.G., inzh., red.; MODEL', B.I., tekhn.red.

[Mechanization and automation of plastics industry processes]  
Mekhanizatsiya i avtomatizatsiya pererabotki plasticheskikh mass.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960.  
(MIRA 13:12)  
338 p.

(Plastics industry--Equipment and supplies)  
(Automatic control)

5-3709

78312  
SOV/79-30-3-66/69

AUTHORS: Retrov, A. A., Zavgorodnyy, V. S.

TITLE: Letters to the Editor. Preparation of Organotin Compounds Containing the Vinylacetylene Radical

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3,  
pp 1055-1056 (USSR)

ABSTRACT: The authors report that trimethylbut-3-en-1-yntin (I) and triethylbut-3-en-1-yntin (II) were obtained by the action of trimethyl- and triethylchlorotin on vinylcethynylmagnesium bromide. They are colorless liquids, readily hydrolyzed in air. I has bp 46.5-47° (10 mm),  $d_4^{20}$  1.3066,  $n_D^{20}$  1.5067. II has bp 89.5-90° (10 mm),  $d_4^{20}$  1.2181,  $n_D^{20}$  1.5098. There are 3 references, 1 U.S., 2 Soviet. The U.S. reference is: R. A. Jacobson, W. H. Carothers, J. Am. Chem. Soc., 55, 1623 (1933).

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Letters to the Editor. Preparation of  
Organotin Compounds Containing the  
Vinylacetylene Radical

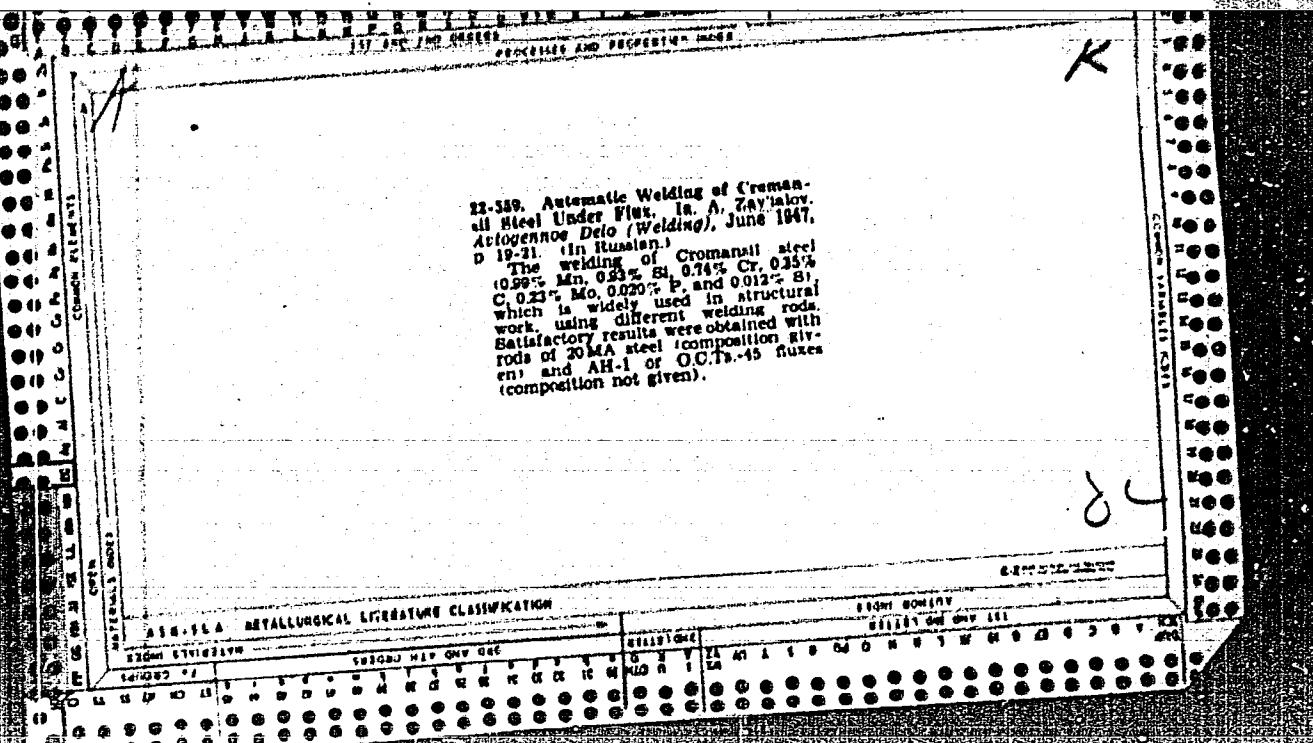
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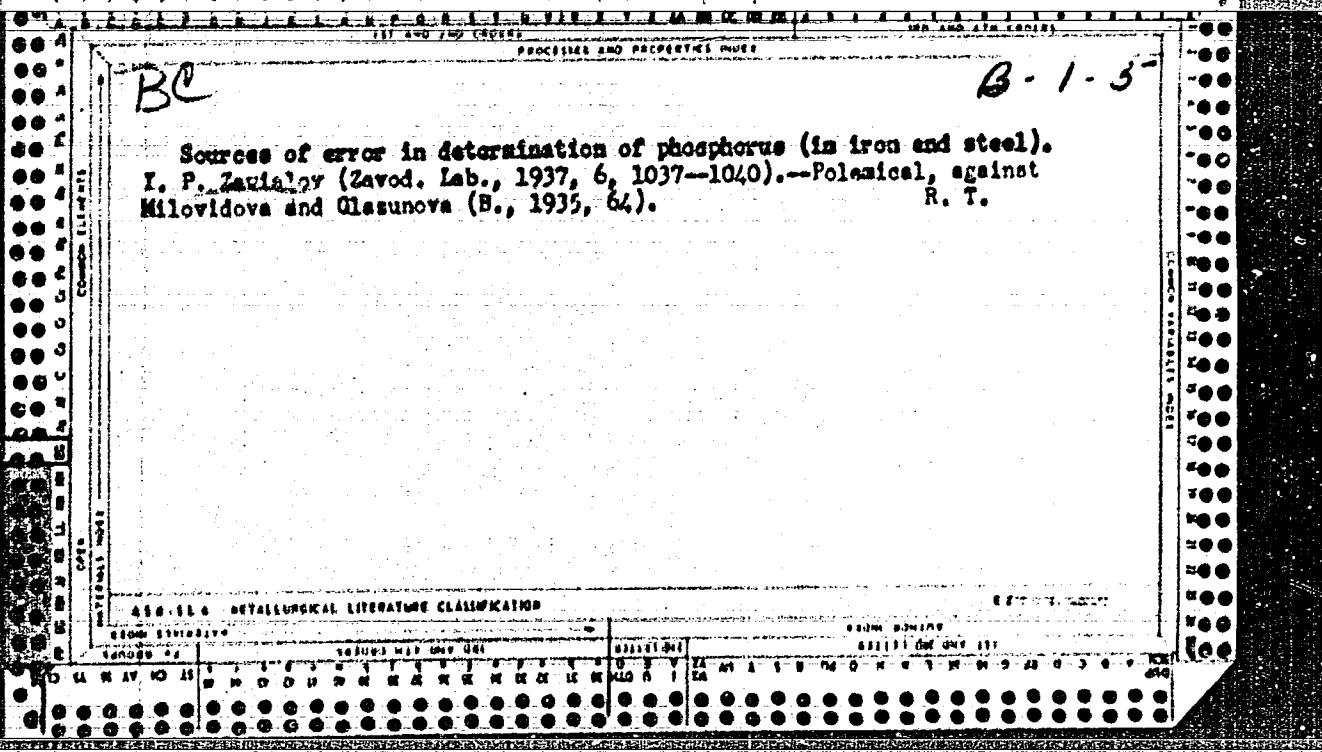
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skiy tekhnologicheskiy institut imeni Lensoveta)

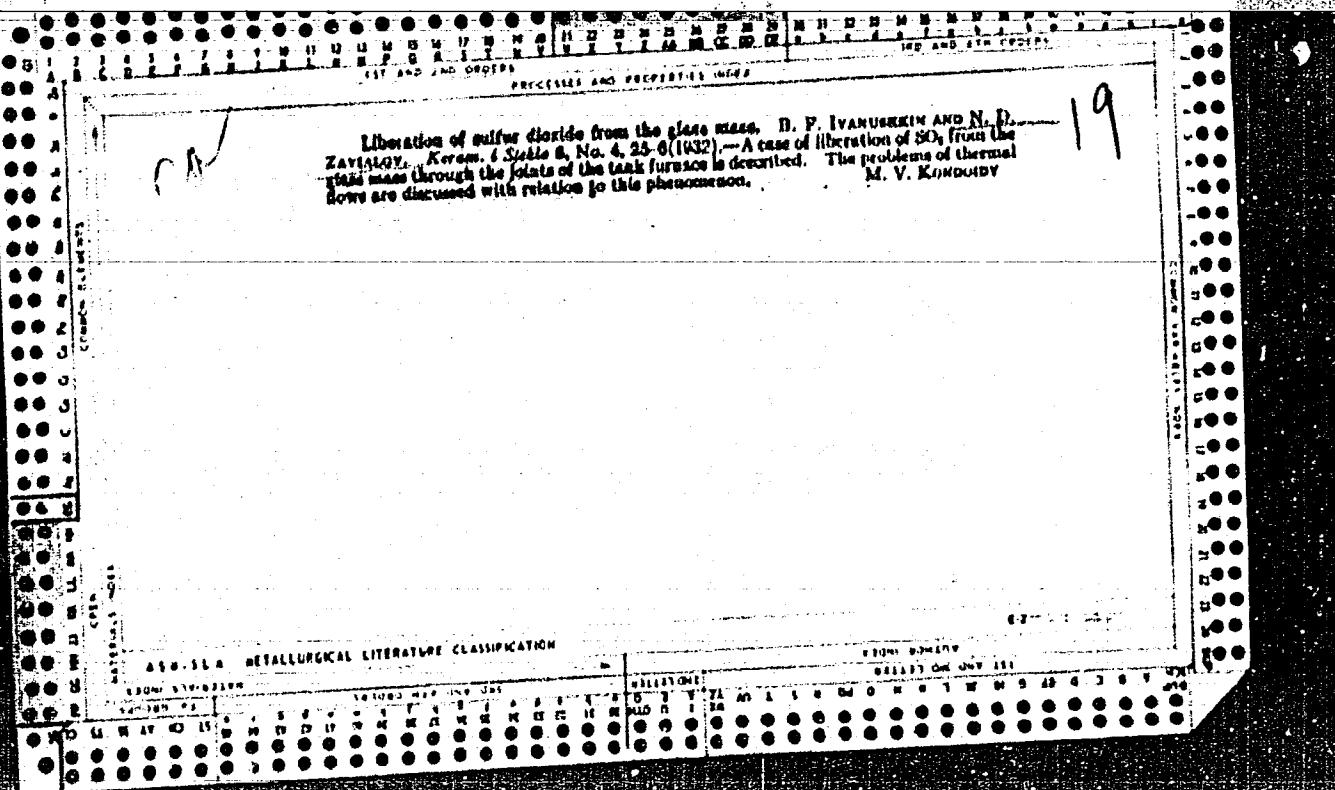
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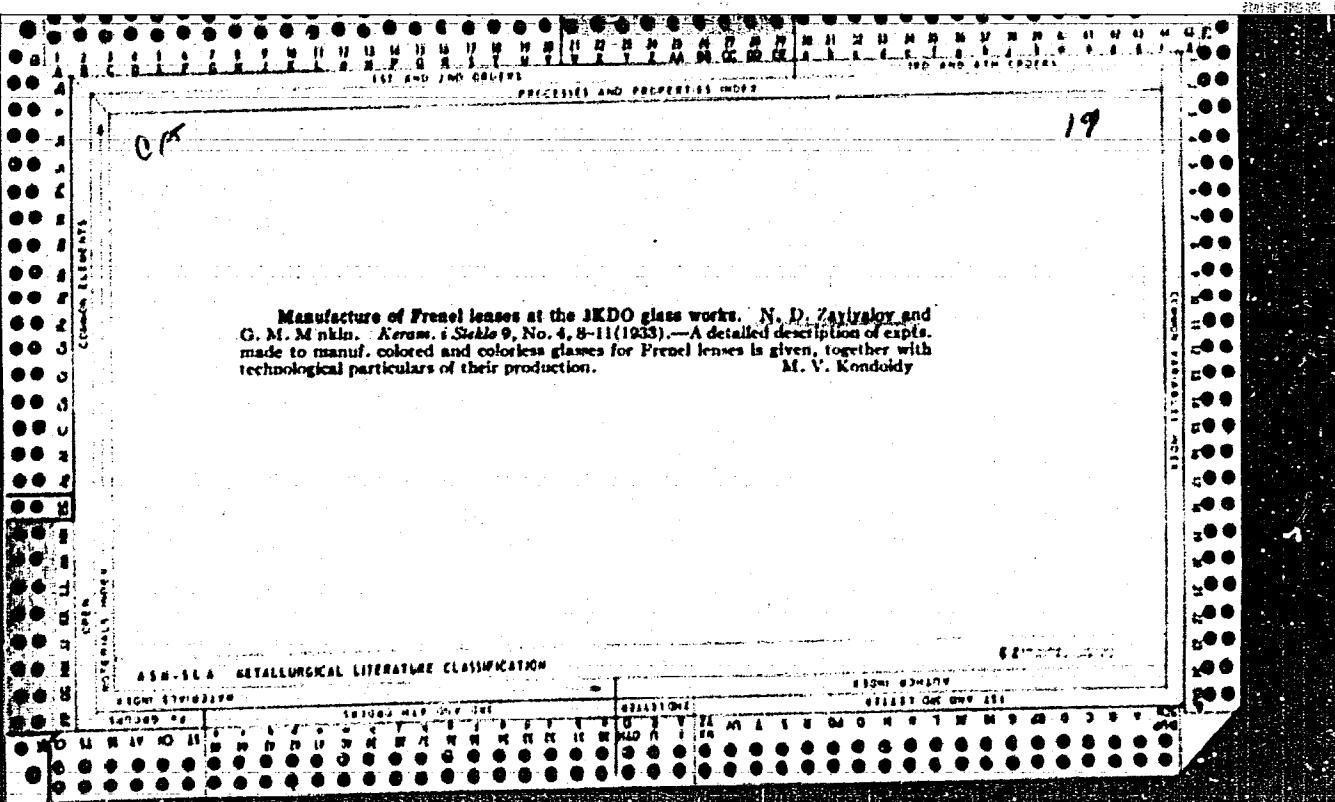
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B-1

RECEIVED AND INDEXED DATE

8-1-9

Behaviour of sodium nitrate and arsenious oxide during heating with glass mixtures. M. A. Berzakov, N. D. Zarutov, T. A. Labin, and G. M. Morkin (J. Appl. Chem. Russ., 1937, 10, 1407-1420).—The wt. losses sustained by mixtures of  $\text{SiO}_2$  and  $\text{CaCO}_3$  with  $\text{NaNO}_3$  and/or  $\text{As}_2\text{O}_3$ , in presence or absence of  $\text{Na}_2\text{CO}_3$ , and by the mixtures  $\text{As}_2\text{O}_3-\text{Na}_2\text{CO}_3$  or  $-\text{NaNO}_3$ , have been measured at 200–900°. R. T.

410-11-6 METALLURGICAL LITERATURE CLASSIFICATION

ROW NUMBER	SECTION	SEARCH WORDS										EXPLANATION										
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GRIGORASH, V.A.; ZAVGORODNYAYA, N.G.; SFANOVSKAYA, V.D.; FIL'YENOKA, L.I.

Hydrobiological essay on lakes of the Meshchera Lowland. Trudy  
002 no.5:57-86 '63.  
(MIRA 17:10)

ZAVGORODNYAYA, T. F. Cand Agr Sci -- (diss) "Effect of Martin phosphate cinder upon the yield ~~and~~ of agricultural crops under conditions of Poles'ye and the forest-steppe<sup>s</sup> of the Ukrainian SSR." Kiev, 1959. 13 pp (Min <sup>of</sup> Agr UkrSSR). Ukrainian Acad Agr Sci. Ukrainian Sci Res Inst of Agriculture), 150 copies  
[redacted] (KL, 45-59, 148)

21737  
S/080/60/033/007/021/024/XX  
D270/D304

5.4100

1687

AUTHORS: Galushko, V.P., Zavgorodnyaya, Ye.F. and Gayvoronskaya,

L.K.

TITLE: The cathode reduction of magnetite

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 1, 1960, 1546-  
1551

TEXT: This study was carried out to supplement a previous one on the cathode reduction of ferric oxide,  $Fe_2O_3$ . Method: Magnetite was obtained by the oxidation of low carbon iron in a current of carbon dioxide at  $900 - 1000^\circ$  for 8 - 10 hours. 50 - 60 g of low carbon iron wire were placed in a porcelain tube between two iron or nickel screens and carbon dioxide was passed through the furnace at a constant rate of 50 - 60 l/hr. On analysis the product contained  $FeO$  32.2%,  $Fe_2O_3$  67.5%,  $Fe_{met}$  0.3% or  $Fe_3O_4$  97.9%,  $FeO$  1.86%,  $Fe_{met}$  0.3%. The magnetite obtained was pounded and sifted. Pieces with dimensions smaller than 25 mm were subjected to cathode reduction. 5 g of magnetite were soaked in electrolyte and pasted on

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S/080/60/033/007/021/024/XX  
D270/D304

## The cathode reduction of magnetite

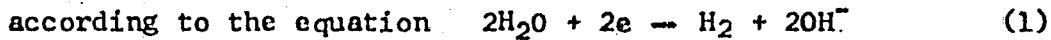
both sides of a lamellar cathode which was then wrapped in linen and bound tightly with thin twine. The method of cathode reduction and iron analysis was similar to that of V.P. Galushko Ye. F. Zavgorodnyaya and L.I. Tischenko (Ref. 6: ZhPKh, XXXII, 7, 1551, (1957)). The percentage of Fe<sub>met</sub> in the mixture of Fe<sub>met</sub> and unreduced magnetite obtained was calculated and the percentage reduction of Fe<sub>3</sub>O<sub>4</sub> worked out from the ratio of the percentage of metallic iron to the sum of Fe<sub>met</sub> and iron contained in the unreduced magnetite. Unless otherwise indicated all experiments continued for a period theoretically sufficient to reduce the magnetite completely and, therefore, the percentage of reduced magnetite is numerically equal to the yield of iron for the given current. Experiments were done at least twice and average results presented. The results are as follows:

a) The effect of electrolyte composition and concentration: (Table 1) Fe<sub>3</sub>O<sub>4</sub> dissolves in acids, is slightly reduced in neutral Na<sub>2</sub>SO<sub>4</sub> (Na<sub>2</sub>SO<sub>4</sub>, 10 H<sub>2</sub>O - 32 g/l); reduces best in NaOH (400 g/l) which was, therefore, used as an electrolyte. In alkaline solutions the reduction of briquetted magnetite is accompanied by the simultaneous production of hydrogen through the dissociation of a molecule of water

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The cathode reduction of magnetite



With an increase in alkali concentration, the activity of the water molecule declines, the hydrogen production potential becomes more electronegative, hydrogen formation more difficult and the percentage reduction of  $\text{Fe}_3\text{O}_4$  rises; b) The effect of current density ( $D_k$ ): (Table 2): The percentage reduction of  $\text{Fe}_3\text{O}_4$  falls with an increase in current density. A.F. Afanas'yeva and O.Ya. Miroshnichenko (Ref. 11: NDVSh., Khim. i Khim. tekhnol., 4, 642 (1958)) and (Ref. 12: Ukr. khim. zh., 25, 3, 326 (1959)), studying single crystals of magnetite, showed that Eq. (1) and the electroreduction of magnetite:  $\text{Fe}_3\text{O}_4 + 4\text{H}_2\text{O} + 8e \rightarrow 3\text{Fe} + 8\text{OH}^- \quad (2)$

occur simultaneously and that as current density increases hydrogen formation comes to predominate since Eq. (2) cannot guarantee passage of large amounts of current; c) The effect of temperature:  $80^\circ$  was chosen as a working temperature since above this the electrolyte evaporates rapidly and frequent correction must be made. Above  $60^\circ$  the percentage reduction of  $\text{Fe}_3\text{O}_4$  increases slowly, probably because of the low electric conductivity of briquetted magnetite. The hydrogen super-tension declines with an increase in temperature

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X

The cathode reduction of magnetite

and the percentage reduction of  $\text{Fe}_3\text{O}_4$  would also be expected to fall. In fact it rose implying that  $\text{Fe}_3\text{O}_4$  reduction supertension fell to a much greater extent than that of the  $\text{H}_2$  solution; d) The granulometric composition of magnetite: Cathode reduction affects the outer layers of  $\text{Fe}_3\text{O}_4$  particles first. The central areas are much more difficult to attack. Therefore, the greater the surface area, i.e. the more rugged the particle surface, the greater the percentage reduction. The granulometric composition of iron powder obtained after reduction contained a small quantity of smaller and larger than average particles but was for the most part (86 - 90%) unchanged. It was concluded that reduction of  $\text{Fe}_3\text{O}_4$  in these experimental conditions occurred in the solid phase; e) The quantity of electricity: Under optimal conditions, the passage of an amount of electricity,  $Q_{\text{theor}}$ , theoretically sufficient to reduce a given amount of  $\text{Fe}_3\text{O}_4$  completely proved insufficient since part was expended on the reduction of hydrogen. When  $\frac{Q}{Q_{\text{theor}}} = 4$  reduction of  $\text{Fe}_3\text{O}_4$  was

virtually completed but only 93% of iron was obtained, part being oxidized during washing and drying. If after removal of alkali the

Card 4/7

The cathode reduction of magnetite

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S/080/60/033/007/021/024/XX  
D270/D304

iron powder was washed with ethyl alcohol it dried much more rapidly, further oxidation was almost completely avoided and yield of Femet increased to 99.7%. The iron powder was grey and fine. Conclusions: 1) The greatest percentage reduction of  $Fe_3O_4$  occurred with NaOH (400 g/l) "solution as electrolyte. It increased with rise in temperature, rise in quantity of electricity, decrease in current density, decrease in size of magnetite particles. 2) During reduction the majority of particles keep their initial dimensions. 3) It was suggested that in the condition of this study cathode reduction of  $Fe_3O_4$  occurred in the solid phase. There are 2 figures, 5 tables and 12 references: 11 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University)

SUBMITTED: August 31, 1959

Card 5/7

ZAVGORODNYAYA, Ye.F.; GALUSHKO, V.P.; DOROSH, T.P.

Mechanism of the cathodic reduction of copper oxide. Part 1:  
Cathodic polarization of the copper oxide electrode. Ukr. khim.  
zhur. 27 no.1:43-48 '61. (MIRA 14:2)

1. Dnepropetrovskiy gosudarstvennyy universitet im. 300-letiya  
vostochedineniya Ukrayiny s Rossiyey.  
(Copper oxide)

GALUSHKO, V.P.; ZAVGORODNYAYA, Ye.P.; SAZONOVA, G.A.

Mechanism of the reduction of cupric oxide at the cathode. Part 2:  
Effect of the pH of the solution on the potential of the copper  
oxide electrode. Ukr khim. zhur. 27 no.2:176-180 '61. (MIRA 14:3)

1. Dnepropetrovskiy gosudarstvenny universitet im. 300-letiya  
vossoyedineniya Ukrayiny s Rossiye.  
(Copper oxide)  
(Electromotive force)

GALUSHKO, V.P.; ZAVGORODNYAYA, Ye.F.; SEMERYUK, V.I.; BATURA, Z.Ye.

Cathodic reduction of copper oxide. Zhur.prikl.khim. 34 no.8:1819-  
1825 Ag '61. (MIRA 14:8)  
(Copper oxide) (Reduction, Electrolytic)

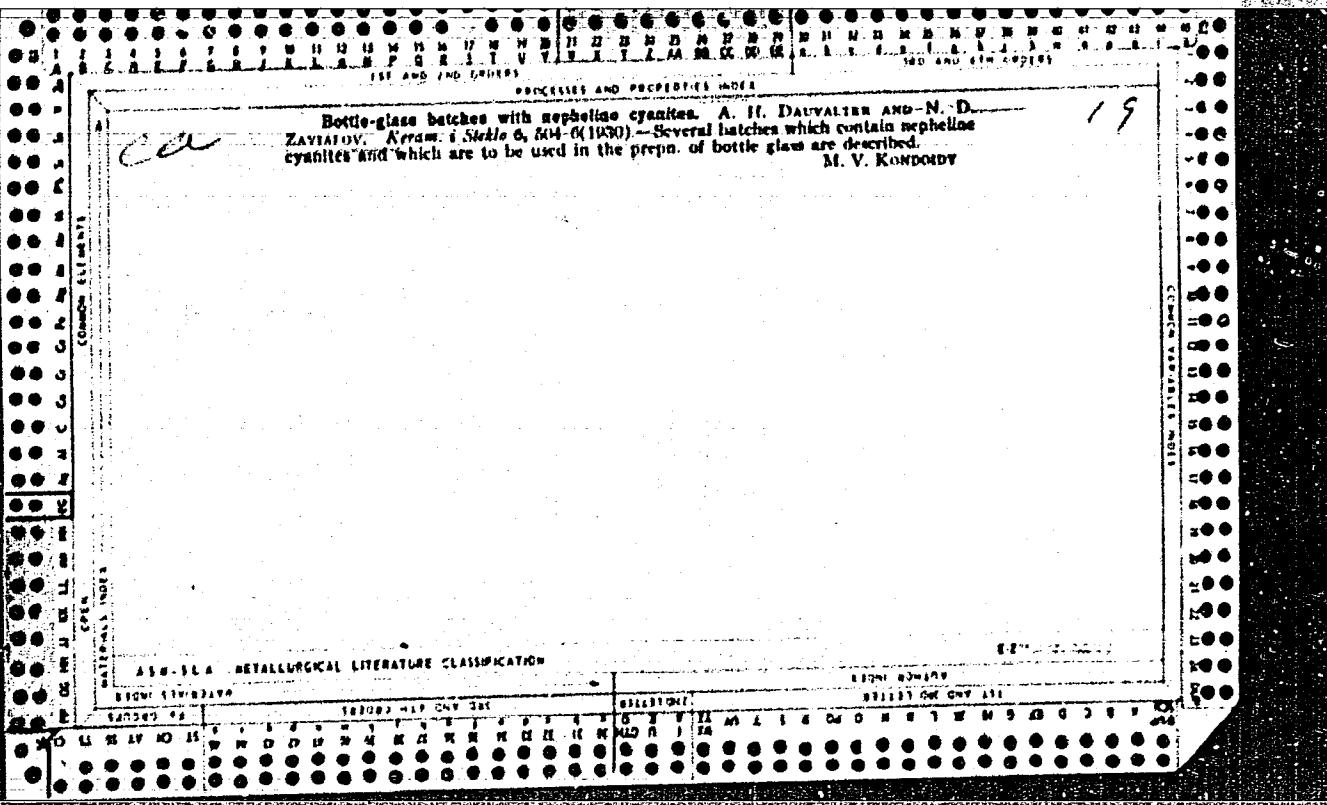
BRATCHENKO, Yu.M., inzh.; NEFEDCHENKO, P.A., inzh.; ZAVGOROMNYAYA, O.M.,  
inzh.

Wall panels from porous foamed slag concrete. Stroi. mat.  
10 no.9:13 S '64 (MIRA 18:2)

IVANOV, Yakov Andreyevich, kand. sel'khoz. nauk, nauchnyy sotr.;  
RYZHEY, Ivan Petrovich, kand. biolog. nauk, nauchnyy sotr.;  
ZAVGORODNYAYA, Yelena Tikhonovna, nauchnyy sotr.; TEPLOVA,  
Yekaterina Alekseyevna, nauchnyy sotr.; MOISEYEV, Aleksandr  
Nikiforovich, nauchnyy sotr.; ABDUMANAPOLOV, S., red.;  
NOSOVETS, F.G., red.; BEYSHENOV, A., tekhn. red.

[Field testing of grain, oilseed, and forage crops in the  
Kirghiz S.S.R.] Aprobatsia zernovykh, maslichnykh i kor-  
movykh kul'tur v Kirgizskoi SSR. Frunze, Kirgizskoe izd-vo,  
1959. 174 p.  
(MIRA 15:3)

1. Kirgizskiy nauchno-issledovatel'skiy institut zemledeliya  
(for Ivanov, Ryzhey, Zavgorodnyaya, Teplova, Moiseyev).  
(Kirghizistan--Grain breeding)  
(Kirghizistan--Oilseed Plants)  
(Kirghizistan--Forage plants)



Liberation of sulfur dioxide from the glass mass. B. F. IVANOVSKIN  
AND N. D. ZAVIALOV. Keram. i Steklo 8, No. 4, 25-6(1932).- A case of  
liberation of SO<sub>2</sub> from the glass mass through the joints of the tank  
furnace is described. The problems of thermal flows are discussed with  
relation to this phenomenon.

M. V. KONDOLY

ZAVOROTCHENKO, I.S.

Potassium for hemp in peat-bog soils. Zemledelie 26 no.7:78-79 J1 '64.  
(MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut l'na.

ZAVIDEEV, I.

We shall keep our word. Mast.ugl.4 no.8:12 Ag'55. (MIRA 8:10)

1. Mashinist kombayna shakhty no.10-bis tresta Snezhnyyantratsit  
Stalinskoy oblasti  
(Donets Basin--Coal mining machinery)

*Javedova / J.*

~~Source: U.S. News & World Report~~

~~Country: Soviet Union~~

Country: Czechoslovakia

Academic Degrees:

Affiliation: Tuberculosis Research Institute (Vysoký učebný ústav tuberkulózy), Prague. Director: Dr. Jan [Jindřich] JINDŘÍČEK

Source: Československá vědecká encyklopédie, v. 1, Praha, 1961, p. 384-385

Date: "Sensitivity of Egg Media for the Culture of Mycobacteria."

Author:

*Z. JAVĚDOVÁ*, *Z. JAVĚDOVÁ*, *Tuberculosis Research Institute (above)*, *Prague*

3

600 1010

ZAVIDONOV A. G.

USSR/Geophysics - Pre-Cambrian

Jan/Feb 52

"Pre-Cambrian Region of the Kaluzhsk Upheaval According to Data From Deep Boring," M. M. Veselovskaya, A. G. Zavidonova

"Iz Ak Nauk SSSR, Ser Geol" No 1, pp.107-114

Gives the petrographic characteristics of the rocks of the cryst fundamant (foundation) revealed by deep borings in the region of the Kaluzhsk upheaval and compares the obtained data with results of studies on the cryst rocks of other regions.

205T69

1. ZAVIDONOV A. G., VESELOVSKAYA, N. M.
2. USSR (600)
4. Kaluga Uplift - Rocks, Igneous
7. New data on paleozoic volcanism in the Russian Platform, Izv. AN SSSR Ser. geol., no. 3, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VESELOVSKAYA, M.M.; ZAVIDONOVA, A.G.

Gneiss

Pre-Cambrian of the Kaluga upland region on the basis of deep borings., Izv. AN SSSR Ser. geol., no. 1, 1952

9. Monthly List of Russian Accessions, Library of Congress, May 1952, 1953, Uncl.

ZAVIDONOV A. G.

USSR/Geophysics - Volcanoes

May/Jun 52

"New Data on Paleozoic Vulcanism in the Russian Platform," A.G. Zavidonova, M.M. Veselovskaya

"Iz Ak Nauk, Ser Geolog" No 3, pp 89-94

Presents a petrographic description of rocks of effusive origin in the region of Kaluga upheaval, which the authoresses consider to belong to the Devonian age. Indebted to B.M. Kupletskiy.

220T63

ZAVIDONOVА, A. G.

"The Ecology of Some Organisms of the Silurian of Moldavia"

A paper presented on 1 April, The Activity of the Moscow Society of Naturalists, Byulleten' Moskovskogo Obshchestva Ispytateley Prirody Vol LX.

No 6, Moscow, Nov-Dec 1955, pp 80-90, Geology Section  
Source: U-9235, 29 Nov 1956.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

ZAVIDONOVА, A.G.

Pre-Paleozoic and Paleozoic deposits of the Moldavian S.S.R. Biul.  
MOIP.Otd.geol 31 no.15:31-50 S-0 '56. (MLRA 10:3)  
(Moldavia--Geology, Stratigraphic)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

ZAVIDONOV A.G.; VESLOVSKAYA, M.M.

Ancient zones of weathering in the region of the Kaluga Uplift.  
Kora vyvetr. no.2:332-346 '56. (MLRA 9:8)  
(Kaluga Uplift--Geochemistry)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

ZAVIDONOVА, A.G.

Silurian sediments in the Baimakliyskiy region of the Moldavian  
S.S.R. Trudy VNIGNI no.8:74-91 '57. (MIR 12:2)  
(Moldavia--Geology, Stratigraphic)

AUTHOR: Zavidonova, A.G. SOV/5-58-5-20/20

TITLE: Devonian Waters of the Tambov Oblast' (Devonskiye vody Tambovskoy oblasti)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody, Otdel geologicheskiy, 1958, Nr 5, pp 159 - 160 (USSR)

ABSTRACT: The author exposes the theses of the report she read on 29 May, 1958 in the Hydrogeological Section of the Society. The whole oblast' can be divided into two parts: the western part is characterized by the occurrence of shallow water-bearing Devonian layers (no more than 100 - 140 m). In the eastern part, these layers are located at great depth, so that the population uses the water from Cretaceous layers.

Card 1/1

USCOMM DC-60.773

ZAVIDONOV A.G.

**AUTHOR:** None given  
**TITLE:** The Hydrogeological Section (Gidrogeologicheskaya sektsiya)  
**PERIODICAL:** Byulleten' Moskovskogo obshchествa izuchenija prirody, Otdel geologicheskiy, 1958, Nr 3, pp 151 - 155 (USSR)  
**ABSTRACT:** The Hydrogeological Section of the Society, (Chairman- O.K. Lange, Secretary - N.P. Lohanova) heard the following reports. On 10 April 1958, by A.S. Dubil'yer, "The Question of Hydrochemical Zonality of Upper-Pearlman Deposits in the South Ural Region", and "The Borate Waters of the Trans-Ural channels by G.I. Tsvetarin. The following persons took part in the discussions: A.A. Alekseev, A.F. Yakusheva, D.F. Kavrikov, S.V. Viktorov, N.P. Lohanova, K.A. Konovalova and O.K. Lange. On 17 April 1958, by S.L. Likhov, "Erosive Surfaces of Mountains, the Structure of Mountain and Hydrogeology", and by V.S. Ganina "The Geomorphology and the Hydrogeologic Map". The following persons took part in these discussions: B.I. Sholov, N.V. Dubinrakhke, K.A. Tsvetarinovskaya, A.A. Konoplyantsev, A.S. Dubil'yer, K.V. Filatov, A.I. Brodsky, V.B. Nayman. On May 15, by K.V. Filatov "The Basic Roles of the Hydrochemical Composition of Subterranean Waters of the Altay, and some Considerations on the Problem of Their Genesis", and by L.N. Gudoshnikov, "The Engineering and Geological Characteristics of Rocks from the Alma-Ata Region". The following persons took part in the discussions: Yu.N. Yarinaeva, V.N. Popov, A.G. Zavidonova, N.P. Lohanova, Yu. V. Butkin, D.S. Sretelyan and O.K. Lange. On May 22, by M.I. Tagayeva, "The Geochemistry of Forn Waters from Quaternary and Pliocene Sediments of the Caspian Sea", and by Ch.Iba-Krol', "The Geochemistry of Forn Solutions of Carboniferous Deposits of the Moscow Oblast". The following persons took part in the discussions: V.N. Popov, A.A. Gavryukhina, G.L. Stedikov, V.P. Dol'skaya, Ch. Iba-Krol', A.G. Zavidonova and O.K. Lange. On May 29 1958, the reports were made by A.I. Silliazdzhetyev, "Some Problems of Hydrogeology in North Africa and Hindustan" and by A.G. Zavidonova "The Burianian Waters of the Tumen Oblast". The following persons took part in the discussions: Yu.N. Butkin, A.G. Zavidonova, N.A. Tsvetarinovskaya, A.S. Dubil'yer, O.K. Lange and A.I. Silliazdzhetyev.

Card 1/3

Card 2/3

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

ZAVIDONOV A.G., referent

Devonian waters in Tambov Province. Biul. MDIP. Otd. geol. 33 no. 5;  
159-160 S-0 '58. (MIRA 12:1)  
(Tambov Province--Water, Underground)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

2 AY IDov, V. I.

7745  
SOT/65-50-2-5-15AUTHORS:  
Izotin, P. Z.; Petrovskiy, N. J.; Devyatova, T. D.TITLE:  
Oxidation of Naphthalene To Obtain Naphthalene AcidsPERIODICAL:  
Khimiya i Tekhnologiya Topliv i Masel, 1960, No. 2  
pp. 23-27 [Transl.]ABSTRACT:  
Production of naphthalene acids from petroleum and its products is limited. The authors examined a method of obtaining these acids and fuel oil fractions from heavy petroleum by oxidation after extraction of soot naphthalene. Under the oxidation after extraction of aromatic compounds, the experimental paraffinic distillate after extraction of aromatic components had the following properties: density  $\rho_1 = 0.87$ ; distillation range 229 to 322°C; kinematic viscosity at 200°C = 5.92; solubility point = -210°C.

Card 1/2

REPRINTED FROM: Izdatelstvo Akademii Nauk SSSR, "Khimiya i Tekhnologiya Molekulyarnykh Soedinenii i Reaktsii," No. 1, 1960, p. 23.

The article gives a method for obtaining naphthalene acids from naphthalene content in kerosene. The oxidation was carried out with an oxidant described by G. E. Gaylordsky (U.S. Patent 2,992,156). A naphthalene bath of 0.5 kg. naphthalene and 0.1 kg. aliphatic acids was used as catalyst. The fraction containing 40 to 50% naphthalene was converted to 60 to 70% naphthalene acids. Hydroxy acids could not be isolated by charcoal because of insolubility. The extracted naphthalene acid had the following properties: density 1.015; refractive index 1.5715 (1.4529); melting point 245°C. The symmetric naphthalene acids, extracted from kerosene, are given in parentheses:

molecular weight = 216 (215); density  $\rho_1 = 1.015$  (10.9972); acid number = 30 (25.01); saponification number = 250 (245); ionization number = 5.92 (2.0); refraction index = 1.5715 (1.4529).

The product has most the same properties as the natural naphthalene acids. The method produces more hydroxy

naphthalene acids than the traditional methods. The method is simple and reliable for acid production. It seems to have more advantages than the traditional methods. The naphthalene acids contain one or more tertiary carbon atoms, at least 2 or 3 carbons removed from the ring. There are 12 differences in soot naphthalene acids. The latter has a higher specific susceptibility to thermal aging.

ASSOCIATION: Ordynnyy 245-Chislennye Sistemnye Research Institute

Card 2/2

IGONIN, P.G.; DESYATOVA, I.D.; ZAVIDOV, V.I.

Specific reaction rate of higher fatty acid formation during the  
oxidation of hard paraffin. Azerb. neft. khoz. 37 no.2:44-46 F '58.  
(Paraffins) (Acids, Fatty) (MIRA 11:6)

ZAVIPOV, V. I.

ПОЛУЧЕНИЕ НАФТЕНОВЫХ КИСЛОТ  
МЕТОДОМ ОКИСЛЕНИЯ ЦИКЛОПАРАФИНОВ  
Н. Г. Ефимов, М. Г. Магафонова, В. Д. Денисова,  
К. К. Завидов

VIII Mendeleyev Congress for General and Applied Chemistry in  
Section of Chemistry and Chemical Technology of Fuels,  
publ. by Acad. Sci. USSR, Moscow 1979

abstracts of reports scheduled to be presented at above mentioned congress,  
Moscow, 19 March 1979.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

IGONIN, P.G.; DESYATOVA, I.D.; PASHENKO, M.A.; ZAVIDOV, V.I.

Some data on the oxidation of solid paraffin in the presence of  
a permanganate, a naphthenate, and manganese carboxyl salts.

Trudy Gruz III no. 4:224-236 '59.  
(Paraffins) (Oxidation)

(MIRA 12:9)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

IGONIN, P.G.; MIROFANOV, M.G.; DESYATOVA, I.D.; ZAVIDOV, V.I.

Oxidizing naphthene hydrocarbons in order to obtain naphthenic acids. Khim.i tekhn.topl.i masel 5 no.2:25-27 V '60.  
(MIRA 13:6)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.  
(Naphthenes) (Naphthenic acid)

ZAVIDOV, V.I.; IGONIN, P.G.; DESYATOVA, I.D.

Paraffin obtained from the destructive distillation of the heavy fraction of hydrocarbons boiling above 450° as a raw material for the production of synthetic fatty acids.  
Khim.i tekhn. i masel 5 no.9:26-31 S '60. (MIRA 13:9)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.  
(Paraffins) (Acids, Fatty)

ZAVIDOV, V.I.

Effect of certain catalysts on the rate of formation of  
fatty acids at different depths of paraffin oxidation. Masl.-  
shir.prom. 26 no.2;23-25 F '60. (MIRA 13:5)

1. Groznenakiy nauchno-issledovatel'skiy neftyanoy institut.  
(Paraffins) (Acids, Fatty)

ZAVIDOV, V.I., inzh.; IGOMIN, P.G.

Investigating eastern paraffin as a raw material for the production  
of fatty acids. Masl.-shir.prom. 26 no.8:16-18 Ag '60.  
(MIRA 13:8)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.  
(Paraffins) (Acids, Fatty)

ZAVIDOV, V.I.; ZMIYEVSKIY, P.K.; FEDOROVA, Z.V.; KNUR.L.I.; ATAMANKIN, A.I.

Obtaining extracts to be used as raw materials in the production of carbon black. Nefteper. i neftekhim. no.6:24-26'63  
(MIRA 17:7)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti i Volgogradskiy netrepererabatyvayushchiy zavod.

ZAVIDOV, V. I.

Maximum coking capacity of raw stock for the production of furnace  
black. Nefteper. i neftekhim. no.6:35-38 '64. (MRA 17:9)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy  
promyshlennosti.

ZAVIDOV, V.I., FEDOROVA, Z.V.; SHAPCHENKO, N.I.

Chemical composition of heavy gas oils of delayed coking.  
Nefteper. i neftakhim. no.7:13-14 '65. (MIRA 18:12)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i  
gazovoy promyshlennosti.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

KARAYBOG, Ye.V.; ZAVILOV, V.I.; SHATCHEIKO, N.I.; MELIKHOVA, A.V.

Paraffins from Volgograd crudes for the production of synthetic fatty acids. Khim. i tekhnicheskaya promst. no. 9:31-33 S '65. (Khira 12:9)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

L 43771-66 EWT(m)/EWP(j)/EWP(t)/ETI LIP(c) ID/RM  
ACC NR AP8015643 (A) SOURCE CODE: UR/0413/66/000/009/0054/0054

INVENTOR: Gyul' misaryan, T. G.; Gilyazetdinov, L. P.; Azhishchev, A. F.;  
Zavidov, V. I.

ORG: none

TITLE: Method of obtaining furnace carbon black, Class 22, No. 181215  
[announced by Scientific Research Institute of the Tire Industry (Nauchno-issledo-  
vatel' skiy institut shinnoy promyshlennosti)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966,  
54

TOPIC TAGS: hydrocarbon, carbon black, furnace ~~carbon black~~

ABSTRACT: An Author Certificate has been issued for a method of obtaining a  
furnace carbon black by decomposing liquid hydrocarbon raw material at 1100—  
1600°C using haloid-containing components. To improve the properties of carbon  
black, the haloid-containing components are added to the raw materials prior to  
decomposition. Oil distillates are suggested as the hydrocarbon raw material for  
decomposition. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 07Dec63/  
Card 1/1 Am 07/

UDC: 678.046.2

PALKIN, A.P., prof., ctv. red.; ZAVGORODNIY, S.V., red.; OCHNEVA, O.S., red.; PEROVA, A.P., red.; UGAY, Ya.A., red.; SHATALOV, A.Ya., red.; SHATALOV, V.P., red.

[Transactions of the Voronezh Branch of the D.I.Mendeleev All-Union Chemical Society] Sbornik trudov Voronezhskogo otdeleniya Vsesoiuznogo khimicheskogo obshchestva imeni D.I.Mendeleeva. Voronezh, Voronezhskoe knizhnoe izd-vo. No.2. 1959.  
(MIRA 17:5)  
184 p.

1. Vsesoyuznoye khimicheskoye obshchestvo imeni D.I.Mendeleyeva. Voronezhskoye otdeleniye.

ZAVGORODNIY, S.V.

PHASE I BOOK EXPLOITATION

SOV/6210

Topchiyev, Aleksandr Vasil'yevich, (Semen Vasil'yevich Zavgorodniy),  
and Valentina Georgiyevna Kryuchkova

Reaktsiya alkilirovaniya organicheskikh soyedineniy olefinami  
(Alkylation of Organic Compounds With Olefins) Moscow, Izd-vo  
AN SSSR, 1962. 323 p. Errata slip inserted. 3000 copies  
printed.

Sponsoring Agency: Akademiya Nauk SSSR. Institut neftekhimicheskogo  
sintezza.

Ed.: L. S. Povarov; Tech. Ed.: S. I. Golub'.

PURPOSE: This book is intended for specialists in organic synthesis  
and students of organic chemistry.

COVERAGE: The book deals with the alkylation of organic compounds  
by olefins. Alkylation of organic acids, aromatic hydrocarbons,  
phenols and their alkyl ethers, halophenols, and haloanisoles

Card 1/3

**Alkylation of Organic Compounds With Olefins**

SOV/6210

with various olefins is described in detail. Alkylation reactions taking place in the presence of  $\text{BF}_3$ ,  $\text{BF}_3 \cdot \text{O}(\text{C}_2\text{H}_5)_2$ ,  $\text{AlCl}_2 \cdot \text{H}_2\text{PO}_4$ ,  $\text{AlCl}_2 \cdot \text{HSO}_4$ , and  $\text{AlCl}_3$  catalysts are included. No personalities are mentioned. References accompany each chapter.

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Ch. III. Alkylation of Phenols and Their Alkyl Ethers by Olefins in the Presence of Catalysts Based on Boron Fluoride	163

**Card 2/3**

Alkylation of Organic Compounds With Olefins SOV/6210

Ch. IV. Alkylation of Halophenols and Haloanisoles by  
Olefins in the Presence of Catalysts Based on Boron  
Fluoride

198

Ch. V. Autoxidation of Alkyl Aromatic Hydrocarbons

244

AVAILABLE: Library of Congress

SUBJECT: Chemistry  
Organic Synthesis

Card 3/3

BN/clb/tem  
2-21-63

ZAVGORODNIY, S.V.; NOVIKOV, I.N.; KRYUCHKOVA, V.G.; SHATALOV, V.P.

Preparation of hydroperoxides of alkylaromatic hydrocarbons,  
and their initiation properties in copolymerization of bivinyl  
with styrene. Khim.prom. no.3:181-185 Mr '62. (MIRA 15:4)  
(Hydrocarbons) (Butadiene polymers) (Styrene polymers)

ZAVGORODNIY, S.V.; ALISOVA, E.V.

Alkylation of anisole by propylene and cyclohexene in the  
presence of  $\text{BF}_3 \cdot \text{H}_2\text{PO}_4$ . Zhur. ob. khim. 32 no.2:350-353  
F '62. (MIRA 15:2)

1. Kiyevskiy politekhnicheskiy institut.  
(Anisole) (Propene)  
(Cyclohexene)

SIOOV, O.V.; ZAVGORODNIY, S.V.

Autoxidation of isopropylcyclohexane by atmospheric oxygen.  
Zhur. ob. khim. 32 no. 2: 562-567 F '62. (MIR. 15:2)

1. Voronezhskiy gosudarstvennyy universitet i Kiyevskiy  
politekhnicheskiy institut.  
(Cyclohexane)  
(Oxidation)

8/020/62/145/005/012/020  
B106/B144

AUTHORS: Zavgorodniy, S. V., and Nasyr, I. A.

TITLE: Cycloalkylation of monoalkyl benzenes by cyclohexene

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 5, 1962, 1061-1063

TEXT: The authors studied the cycloalkylation of toluene, ethyl benzene, and n-propyl benzene by cyclohexene in the presence of  $\text{BF}_3 \cdot \text{H}_2\text{PO}_4$  as a catalyst under varying conditions. At molar ratios of alkyl benzene : cyclohexene : catalyst = (1 to 5) : 1 : (0.1 to 0.4), mainly monoalkylation occurs in o- and p-position to the alkyl radical of the aromatic hydrocarbon, with the p-product prevailing. An increase from 1 to 5 alkyl benzene moles per 1 mole cyclohexene under otherwise equal conditions increases the monocyclohexyl alkyl benzene yield. Optimum conditions: toluene: 20°C, molar ratio = 5 : 1 : 0.3, yield 91%; ethyl benzene: 60°C, molar ratio = 5 : 1 : 0.3 (or 5 : 1 : 0.4), yield 90%; n-propyl benzene: 60°C, molar ratio = 3 : 1 : 0.3, yield 97%, besides 8.6% dicyclohexyl-n-propyl benzenes. At the molar ratio alkyl benzene : cyclohexene : catalyst =

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S/020/62/145/005/012/020  
B106/B144

Cycloalkylation of ...

at 0.5 : 1 : 0.3, dicyclohexyl alkyl benzenes form with considerable yields decreasing in the order toluene > ethylbenzene > n-propyl benzene while the yields in monocyclohexyl alkyl benzenes increase in the same order. The yields in monocycloalkylation show a maximum in all three cases within the range 20 - 30°C, whereas those in dicyclohexyl alkyl benzenes are almost independent of temperature. In the range of 0.2 - 0.4 moles per mole of cyclohexene, the amount of catalyst does not affect the yield in monocyclohexyl alkyl benzenes. The cyclohexene is added, with vigorous stirring, to an alkyl benzene - catalyst mixture. The slower the addition the better the yields, particularly in the alkylation of n-propyl benzene. Stirring after adding cyclohexene has no effect in the case of toluene and ethyl benzene, but increases the yields in dicyclohexyl-n-propyl benzenes at the expense of the monocyclohexyl-n-propyl benzenes. Main reaction products: p-cyclohexyl toluene: colorless liquid, b. p. 101°C/4 mm,  $d_4^{20}$  0.9380,  
 $n_D^{20}$  1.5244; p-cyclohexyl-ethyl benzene: b. p. 108 - 109°C/4 mm,  $d_4^{20}$   
0.9291,  $n_D^{20}$  1.5204; p-cyclohexyl-n-propyl benzene: b. p. 119 - 120°C/4 mm,  
 $d_4^{20}$  0.9216,  $n_D^{20}$  1.5160. There are 4 figures.

8/020/62/145/005/012/020  
B106/B144

Cyclosalkylation of ...

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiev Polytechnic Institute), Institut organicheskoy khimii Akademii nauk UkrSSR (Institute of Organic Chemistry of the Academy of Sciences UkrSSR)

PRESENTED: March 21, 1962, by A. V. Topchiyev, Academician

SUBMITTED: March 21, 1962

Card 3/3

ZAVGORODNIY, S.V.

Alkylation of 1,1,3-trimethyl-3-phenylindan by olefins in the presence of the  $\text{BF}_3 \cdot \text{H}_3\text{PO}_4$  catalyst. Dokl. AN SSSR 143 no.5; 1101-1104 Ap '62. (MIRA 15:4)

1. Kiyevskiy politekhnicheskiy institut. Predstavлено akademikom A.V.Topchiyevym.

(Indan) (Olefins)

ZAVGORODNIY, S. V.

8/070/62/032/009/007/011  
1048/1242AUTHORS: Novikov, I.N., Antonova, A.M., Zhilina, R.I.,  
Furticheva, R.P., Shatalov, V.P. and Zavgorodny, S.V.TITLE: Synthesis and autoxidation of isopropyloctohexyl-  
benzene

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 9, 1962, 2084-2087

TEXT: Experiments on the cycloalkylation of isopropylbenzene by  
cyclohexanol in the presence of sulfuric acid and the oxidation of  
the product thereof are described. The relative amounts of reagents  
taken for the alkylation varied from an isopropylbenzene/sulfuric  
acid mole ratio of 2:3 to 3:1.5 with 1 mole of cyclohexanol. The  
isopropylbenzene and sulfuric acid were mixed first, the cyclohexa-  
nol was added slowly (during 2.5-3 hrs) and the reaction was con-  
tinued with stirring for another 4-5 hrs. The end of the reaction  
was indicated by a constant value of the refraction index of the  
organic phase. The main reaction product was isopropyloctohexyl-  
benzene; its yield was highest (81.2%) when the reagents were taken

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5/070/62/032/009/007/011  
1048/1242

Synthesis and autoxidation...

in the ratio isopropylbenzene/sulfuric acid/cyclohexanol = 3/3/1, and lowest (48.4%) when this ratio was 3:1.5:1. Variations in the temperature, within the range 10-40°C, had no significant effect on yield. The yield of by-products (isopropyldiocyclohexylbenzenes, cyclohexene polymers) varied between 10.2 and 23.5%. A chromatographic analysis showed that the isopropylcyclohexylbenzene is a 16:21:63 mixture of the o-, m-, and p-isomers. The isopropylcyclohexylbenzene was oxidized in air, at 110°C, in the presence of a small amount of an initiator (e.g., 1 wt % isopropylbenzene hydroperoxide) and a small amount of alkali (e.g., 0.1 wt % NaOH); the total yield of hydroperoxides varied between 67.0 and 71.5%, after a reaction time of 28-40 hrs. Among the hydroperoxides separated from the reaction product by extraction with NaOH were: n-isopropylcyclohexylbenzene dihydroperoxide (m.p. 105-106°C), and n-isopropylcyclohexylbenzene monohydroperoxide (m.p. 56-57°C). There are 2 figures and 2 tables.

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6/079/62/032/003/007/011  
1048/2242

Synthesis and autoxidation...

ASSOCIATION: Kievskiy polytekhnicheskiy institut (The Kiev  
Polytechnic Institute)

SUBMITTED: August 19, 1961

Card 3/3

ZAVGORODNIY, S.V.; NASYR, I.A.

Cycloalkylation of monocalkylbenzenes by cyclohexene. Dokl. AN  
SSSR 145 no.5:1061-1063 '62. (MIRA 15:8)

1. Kiyevskiy politekhnicheskiy institut i Institut organicheskoy  
khimii AN USSR. Predstavлено akademikom A.V.Topchiyevym.  
(Benzene) (Cyclohexene)

IGONIN, P.G.; DESYATOVA, I.D.; PASHENKO, M.A.; ZAVIDOV, V.I.

Effect of catalysts on the rate of formation and the composition of carboxylic acids. Khim.i tekhn.topl.i masel 5 no.10:21-24 O '60.  
(MIRA 13:10)

1. Groznenskly nauchno-issledovatel'skiy neftyanoy institut.  
(Paraffins) (Catalysts) (Acids, Organic)

ZAVIDOV, V.I.

Quality of raw materials for the production of active chimney soot.  
Kauch.i rez. 21 no.7:28-29 Jl '62. (MIRA 15:7)

1. Volgogradskiy nauchno-issledovatel'skiy institut nefti i gaza.  
(Carbon black)

ZAVIDOV, V.I.

Thermal cracking of extracts. Nefteper. i neftekhim. no.1:  
14-16 '63. (MIRA 16:10)

1. Volgogradskiy nauchno-issledovatel'skiy institut nefti i  
gaza.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

ZAVIDOV, V.I.; FEDOROVA, Z.V.; SHAPCHENKO, N.I.

Investigating the low-sulfur extract oils and the product  
of their thermal cracking. Khim. i tekh. topl. i masel 8  
no.9:23-27 S '63. (MIRA 16:11)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

ZAVIDOV, V. I.; FEDOROVA, Z. V.; SHAPCHENKO, N. I.

Coker gas oils as a new source of raw materials for the production of carbon black. Nefteper. i neftekhim. no.5:27-28 '65.  
(MIRA 18:7)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

ZAVGORODNIY, S.V.; KHARCHENKO, L.S.

Alkylation of o-cresol by propene in the presence of catalysts  
BF<sub>3</sub>.H<sub>3</sub>PO<sub>4</sub> and BF<sub>3</sub>.O(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>. Izv.vys.uchob.zav.;khim.i khim.tekh.  
6 no.5:795-798 '63. (MIRA 16:12)

1. Kiyevskiy politekhnicheskiy institut, kafedra organicheskoy  
khimii.

NOVIKOV, I.N.; ZAVGORODNIY, S.V.

Autoxidation of alkyl benzenes. Ukr. khim. zhur. 29 no.9:950-954  
'63. (MIRA 17:4)

1. Kiyevskiy politekhnicheskiy institut.

**KHARCHENKO, L.S.; ZAVGORODNIY, S.Y.**

Alkylation of p-cresol with propylene in the presence of  
 $\text{BF}_3 \cdot \text{H}_3\text{PO}_4$  and  $\text{BF}_3 \cdot \text{O}(\text{C}_2\text{H}_5)_2$ . Ukr.khim.zhur. 30 no.2:187-190  
'64. (MIRA 17:4)

1. Kiyevskiy politekhnicheskiy institut i Institut organicheskoy  
khimii AN UkrSSR.

KHARCHENKO, L.S.; ZAVGORODNIY, S.V.

Alkylation of m-cresol with propylene. Zhur.prikl.khim. 37 no.1:165-170  
Ja '64. (MIRA 17:2)

1. Kiyevskiy politekhnicheskiy institut i Institut organicheskoy khimii  
AN UkrSSR.

NASYR, I.A.; ZAVGORODNY, S.V.

Some conversions of methylcyclohexylbenzene hydroperoxides.

Ukr. khim. zhur. 30 no.10:10/3-10/5 '64.

(MIRA 17:11)

1. Kiyevskiy politekhnicheskiy institut i Institut organicheskoy  
khimii AN UkrSSR.

KHARCHENKO, I.S.; ZAVGORODNY, S.V. [Zavhorodnii, S.V.], doktor khim.  
nauk

Methylisopropylcyclohexanols and some of their derivatives.  
Khim. prom.[Ukr.] no.1:18-20 Ja-Mr '65. (MIRA 18:4)

ZAVGORODNIY, S.V.; STRASHNENKO, A.V.

Condensation of anisole with acetone and cyclohexanone in the  
presence of  $\text{BF}_3 \cdot \text{H}_2\text{PO}_4$  complex. Zhur. org. khim. 1 no.1;1C6-111  
Ja '65. (MIRA 18:5)

1. Kiyevskiy politekhnicheskiy institut.

NASYR, I.A.; ZAVGORODNIY, S.V.

Synthesis and autoxidation of methylcyclohexylbenzene. Ukr. khim.  
zhur. 30 no.8:862-867 '64. (MIRA 17:11)

1. Kiyevskiy politekhnicheskiy institut i Institut organicheskoy  
khimii AN UkrSSR.

ZAVGORODNIY, S.V.; KOGUTOVA, O.B.

Synthesis and oxidation of 4-sec-amyltoluene. Neftekhimiia 5  
no.6:869-872 N-D '65.  
(MIRA 19:2)

1. Kiyevskiy politekhnicheskiy institut. Submitted July 9, 1964.

SOV/112-57-5-11288

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 5,  
pp 249-250 (USSR)

AUTHOR: Zavidov, S. V.

TITLE: Amplifiers with AC-Supplied Anode Circuit  
(Usiliteli s pitaniyem anodnoy tsepi peremennym napryazheniyem)

PERIODICAL: Sb. st. nauchn.-stud. o-va Mosk. energ. in-ta, 1956, Nr 9, pp 5-13

ABSTRACT: Amplifiers with AC-supplied anode circuit are intended for voltage or power amplification with or without DC component. The amplification factor of such an amplifier depends on the same factors on which it depends in case of a DC-supplied anode. The load of such an amplifier may be represented by a resistance, by a resistance-inductance, by a resistance-inductance-capacitance, or a resistance-capacitance. The capacitance can be connected for reducing the output ripples and for increasing the amplification factor. A simple half-wave circuit is described in which, with the input

Card 1/3

SOV/112-57-5-11288

## Amplifiers with AC-Supplied Anode Circuit

voltage  $U_{vkh}$  in phase with  $I_a$ , the anode current  $U_{vkh}$ ? and the anode-current-cutoff angle increase. Simplicity is the advantage of this circuit. A pushpull half-wave circuit with a resistive-capacitive load (a balanced stage) is also described; the voltages  $I_a$ ? on the tube anodes are in phase, and the voltages  $U_{vkh1}$ ,  $U_{vkh2}$  on the grids are in phase opposition. The circuit can function as a phase detector. In the circuit with resistive-capacitive load (see fig.), if  $\omega C_a R_i \geq 0.5 - 1.0$  (to secure a smoothed output voltage), the current mean value for  $U_{vkh} = \text{const}$  will be

$$I_{a sr} = [ E_{am} \sin \theta - (E_{ao} + M U_{co} - M U_{vkh}) \theta ] / (\pi R_i + \theta R_a)$$

The amplification factor will be

$$K = M R_a / (\pi R_i / \theta + R_a) \quad \text{where } \theta \approx \sqrt[3]{R_i U_d / R_a E_{am}}$$

If  $U_{vkh} = U_{vkhm} \cos \omega t$ , then

$$I_{a sr} = [ E_{am} \sin \theta - (E_{ao} + M U_{co}) \theta + U_{vkhm} \sin \theta \times M ] / (\pi R_i + \theta R_a)$$

$$K = M R_a / (\pi R_i / \sin \theta + \theta R_a / \sin \theta)$$

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SOV/112-57-5-11288

Amplifiers with AC-Supplied Anode Circuit

The maximum reverse voltage applied to the tube  $U_{vt} = \sqrt{2E_a \text{ eff}} + U_d$  should not exceed the permissible voltage  $U_{v \text{ dop}}$ . Error in using the above formulae for calculations does not exceed 10-15% at  $\theta \leq 45^\circ$ .

V.I.A.

Card 3/3

RAPOPORT, Mikhail Moiseyevich; ZAVIDOVА, A.V., red.;  
IL'YUSHENKOVA, T.P., tekhn. red.

[Machine accounting in agriculture] Mekhanizatsiya  
ucheta v sel'skom khoziaistve. Moskva, Gosstatizdat,  
1963. 130 p. (MIRA 17:1)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

ARAVIYSKIY, Apollon Nikolayevich; ZAVIDOVA, A.V., red.

[Collection of problems and exercises in commercial computing] Sbornik zadach i uprazhnenii po khoziaistvennym vychisleniiam. Moskva, Statistika, 1964. 141 p. (MIRA 17:7)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

BAKLANOV, Gleb Ivanovich; ZAVIDOVА, A.V., red.

[Statistical measurement of labor productivity in industry] Statisticheskoe izmarenie proizvoditel'nosti truda v promyshlennosti. Moskva, Statistika, 1965. 61 p.  
(MIRA 18:4)

ZAVIL'DEL'SKIY, O.

"Review of Blackwell and Girshik's book Theory of Games" (2 November 1956).

Paper presented at the Seminars on Cybernetics at Moscow University during the 1956-57 school year.

Problemy Kibernetiki, No. 1, 1958

ZAVIDOVSKAYA, G. I.

Chronic asthenic state following alimentary dystrophy. Prak.  
sudebnopsikh. ekspert. no.1:58-65 '60. (MIRA 15:7)

(ASTHENIA) (PSYCHOSES) (STARVATION)

SHAMANINA, V.M.; ZAVIDOVSKAYA, G.I.

Characteristic evaluation of theralene in the clinical aspects of  
depressive states. Zhur. nevr. i psich. 64 no.11:1741-1746 '64.  
(KIEA 18:6)

1. Institut psichiatrii AM SSSR, Moskva.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

GOLOVAN', L.I.; ZAVIDOVSKAYA, G.I.; SUKAL'SKAYA, I.Yu.

Use of librium in the treatment of schizophrenia with obsessions.  
Zhur. nevr. i psikh. 65 no.10:1574-1580 '65.

(MIRA 18:10)

1. Institut psikiatrii AMN SSSR, Moskva.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"

S/194/62/000/005/022/157  
D256/D308

AUTHORS: Gagarskiy, A.P., Molchanov, A.S., and Zavilevich, M.L.

TITLE: Elements of the electrical circuit for automatic control of weight irregularities of ribbons

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1962, abstract 5-2-101 d (Nauchno-issled. tr. Tsentr. n.-i. in-t prom-sti lub. volokon, 1961, 15, 42-54)

TEXT: A detailed description is given of the elements of an automatic system devised for the weight irregularity control of ribbon on the J-1-J (L-1-L) ribbon machine under development for the spinning industry at TSNIILV. The operation of the device is based on changing the speed of the pulling rollers according to the thickness of the ribbon entering the feeding rollers; consequently the regulator is a servo system. The automatic control system consists of pickups measuring the ribbon thickness, an integrating link, which adds voltages to the pickup [Abstractor's note: Probably a misprint of 'from the pickups'] delay unit memorizing the signal arriving from Card 1/2 ✓

S/194/62/000/005/022/157

D256/D308

Elements of the electrical circuit ...

the integrator for a period during which the ribbon passes from the point of measurement to the point of extension, an amplifier link, a control motor (rotating the pulling rollers), a feedback coupling link comprising a tacho-generator driven by the control motor. An inductive pickup is used for continuous measuring of the ribbon thickness, consisting of a W-shape transformer core with two secondary windings connected in opposite phase. The delay unit includes a phase shifting arrangement, the phase-shift being proportional to the time of delay. It consists of four R-C links with cathode-followers in between. For the amplification of the signals a DC amplifier with strong negative feedback is employed. The driving motor NH-5 (PN-5) is used, the velocity pickup is a tachogenerator type ET-7/110 (ET-7/110). Technical specification and detailed calculations of the elements are presented. 13 figures. [Abstractor's note: Complete translation].

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S/119/62/000/006/001/001  
D254/D308

AUTHOR: Zavilevich, M.L.

TITLE: A device for determining the mean value and mean square deviation of thickness of the product

PERIODICAL: Priborostroyeniye, no. 6, 1962, 17-19

TEXT: The author describes a device developed at the Laboratoriya avtomatiki Tsentralnogo nauchno-issledovatel'skogo instituta promyshlennosti lubyanykh volokon (Laboratory of Automation of the Central Scientific Research Institute of Bast Fiber Industry) for determining the mathematical expectation, dispersion and mean square deviation  $\sigma_x^2$  of the thickness of product measured by a pickup. A block diagram and basic electrical diagram of the device are given and explained. Tests have shown that  $\sigma_x^2$  is obtained with an accuracy of 8-9% and the variation coefficient with an accuracy not less than 10%. ✓

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"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7

SEVOST'YANOV, A.G., prof., doktor tekhn. nauk; ZAVILEVICH, M.L., prepodavatel'

Process of fiber flow arrangement and straightening on roller carding  
machines. Tekst. prom. 25 no.8:14-20 Ag '65. (MIRA 18:9)

1. Moskovskiy tekstil'nyy institut.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010012-7"